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MEDICAL.

DR. ADAMS,

I HERE preſent you, ſir, with ſome obſervations on one of our endemics, which every ſeaſon makes large additions to the number of its victims. My wiſh, ſir, is, that people would view the complaint as in fact it really is—*not contagious*. It is to be feared that many have ſuffered for want of proper attention in nurſing, if not for medical aſſiſtance; and if theſe remarks ſhould have the good fortune to "do away" unneceſſary fear, I ſhall feel ſatisfied. The theoretical part, as applicable to other diſeaſes, has no claim to originality; the practical part, from experience I may venture to recommend.

Should you, ſir, upon peruſal, find it void of "idle ſpeculation and mere theory," and worthy a place in your Regiſter, by inſerting it you will oblige

Your humble ſervant, A. B.

Angina Maligna, or Ulcerous Sore Throat.

IT is generally uſhered in with alternate heats and chills, great languor, anxiety, nauſea and vomiting, ſometimes purging, acute pain with vertiginous affection of the head, intenſe thirſt; very frequently a florid appearance, with ſome tumefaction of the fauces, though not ſufficient to impede deglutition; pulſe ſmall, frequent, and irregular; tongue moiſt, ſometimes covered with a thick yellowiſh ſlough; ſkin dry and contracted; on the ſecond or third day generally efflorescence

appears on the ſkin, with an abatement of every ſymptom; on the fifth or ſixth day from the attack, ſometimes later, efflorescence diſappears, ſucceeded by deſquamation of the cuticle.

It has ever been the opinion of phyſicians, that this diſeaſe was contagious; that the infectious miaſma, floating in the atmoſphere, was inhaled with the breath, or ſwallowed with the ſaliva, and from its immediate contact produced the tumefaction of the fauces: but this is not invariably the caſe; one in four perhaps will have not the leaſt enlargement of the maxillary glands. Now the queſtion will ariſe, Can the complaint be communicated in any other way than the ones before mentioned, allowing it to be contagious? I am aware that DARWIN mentions the inſtance of an attendant being under the neceſſity of frequently applying a ſore hand to the ſick, who in conſequence of it was immediately attacked, and died of the complaint. Is it not more probable, from his (the attendant) expoſed ſituation, that he would have contracted the complaint by inhalation?

We contend that the complaint is not contagious, and our opinion is founded on obſervation. In the two extremities of the ſame neighbourhood many caſes will occur; but in the intermediate ſpace, notwithſtanding a daily communication with the ſick, there will not be a ſingle inſtance. The nurſes and attendants oftentimes eſcape, whilſt others in the ſame houſe and neighborhood, who have had no communication whatever with the diſeaſed, will be attacked.

We offer, as another reaſon to prove its non-contagiouſneſs, the different appearances put on, in the ſame ſtage of the complaint, in different ſubjects. In ſome there is great enlargement of the fauces, attended with ulcerations, without the leaſt efflorescence; in others, a full efflorescence, without any tumefaction of the fauces; and in ſome neither. The tumefaction of the fauces we do not conſider as proof that a "putrid virus," or "miaſma ſui generis," (as they are pleaſed to term it) was inhaled at inſpiration, or ſwallowed with the ſaliva. The uſe of glands is to ſecrete or ſeparate a fluid from the circulating blood. Is it, then, at all improbable that the glands ſhould be affected with inflammation and enlargement in ſecreting a cauſtic fluid which has power to erode and excoriate the ſkin itſelf?

We believe the primary cauſe of the complaint to be torpidity of the liver, induced by the debilitating effects of heat, or quick tranſition from heat to cold. It has been ſatisfactorily demonſtrated, that food, taken into the ſtomach, has a direct tendency to paſs into acetous fermentation, and that

the bile, the baſis being alcaleous, is a proviſion of nature, to counteract that diſpoſition. Whenever, therefore, a partial or complete ſuſpenſion of the natural action of the liver, from whatever cauſe, takes place, acetous fermentation or ſeptic acid is conſequently produced; this acid, lodged upon the ſtomach and bowels, is taken up by the abſorbents, and by a very natural action is thrown upon the ſkin, producing, from its cauſticity, efflorescence and deſquamation.

In the method of cure, it is neceſſary to excite a natural action of the liver, to correct and obtund the acid already collected on the ſtomach and bowels, and to aſſiſt nature in throwing off the complaint in her own way, by the ſkin; theſe intentions are effectually anſwered by the uſe of emetics, alcaleous ſalts, and diaphoretics: the emetic to be made uſe of is a combination of ipecacuanha, turpith mineral, and ſalt of tartar; to be given in quantity ſufficient to produce one or two ejections, and repeated every ſixteen or eighteen hours, until it produces copious perſpiration. After the emetic, to allay the thirſt, a weak ſolution of ſalt of tartar in common water with vinum antimonii to be taken freely. When the patient is comatoſe, as is often the caſe, and the ſtomach cannot eaſily be excited by an emetic, the uſe of epiſpaſtics have been found very ſerviceable. Where there is ulceration of the fauces, frequently touching them with the powder of allum, or gargling the mouth with lime water, gives a check to their increaſe, and diſpoſes them to heal.

Here ſuffer me to caution the practitioner againſt the precipitate uſe of cathartics, even the mildeſt. Cathartics, every ſpecies of them, operate by ſtimulating the orifices of the abſorbent veſſels, thereby producing a retrograde motion of them, and conſequent diſcharge of their contents. We ſuppoſe abſorption of the ſeptic acid to have taken place from the commencement of the attack. The practitioner will probably not be called in for ſome hours; by this time the morbific matter is making its way through the ſkin; then, by the uſe of cathartics, the diſcharge is diverted and brought back upon the bowels, where it becomes completely concentrated, and producing almoſt immediate ſphacelation, convulſions and death enſue. No diſcharge from the bowels ſhould be ſolicited or admitted; even a moderate diarrhœa ſhould be immediately reſtrained. After deſquamation of the cuticle, we are aſſured that the exciting cauſe is removed; then gentle doſes of phyſic, by emptying the bowels, are of ſervice.

To the Editor of the MEDICAL AND AGRICULTURAL REGISTER.

SIR,

IT is with pleaſure and pride, I congratulate the citizens of New England, and of the United States in general, on the eſtabliſhment of a work of ſuch general utility, as the *Medical and Agricultural Regiſter;* and moſt ſincerely wiſh that the encouragement given to its publication may be as laſting as its effects will be beneficial. Such a work has long been wanted in the walks of ſcience and art. The periodical ephemera which now-a-days ſolicit the patronage of the public, are hardly worth the peruſal of thoſe who wiſh to acquire uſeful knowledge. They generally abound in eſſays on faſhion, love verſes, and ſcraps from the dead languages. In ſhort, their object is to give amuſement; while the deſign of your work is to render information, on ſubjects which are intereſting to every grade of being, from the king on his throne to the peaſant in his cottage.

On the ſubject of the *yellow fever*, (or *plague*, as it is ſometimes called) much has been ſaid and written, yet little ſatisfaction has been obtained, relative to the fact, whether a cure can be effected in this moſt deſtructive of all diſeaſes. Much diviſion likewiſe has ariſen on the treatment of a caſe of yellow fever:—a younger ſon of GALEN,* therefore, (both for his own ſatisfaction and for that of others,) reſpectfully ſolicits, from ſome of your elder medical correſpondents, an anſwer to the following

Query.

Is the mode recommended by Dr. RUSH, of Philadelphia, that is, purging and bleeding, the moſt proper method of treatment in a caſe of *yellow fever?*

Yours, &c.

WACHUSET.

Cambridge, March 20, 1806.

For the MEDICAL AND AGRICULTURAL REGISTER.

DR. ADAMS,

NOTICING in No. II. page 29, the following queſtion, I ſubjoin an anſwer; which, if you ſhould be favoured with nothing better, you will pleaſe to introduce into your publication, and oblige

IATROS.

* The phraſe, "*a ſon of* GALEN," is ſynonimous with, *a phyſician.*
EDITOR.

Queſtion. Why is it that the ravages of the *conſumption* are ſo much greater with the female ſex than with the male?

Anſwer. The greater delicacy of conſtitution, or the ſuperior ſuſceptibility of impreſſion which characterizes the female ſex, together with their peculiar cuſtoms, modes of life, &c. all which prediſpoſe them in an eſpecial manner, to that *inflamed ſtate* of the ſanguiferous ſyſtem which I conſider as conſtituting the *eſſence of conſumption.*

AGRICULTURAL.

Natural Hiſtory of the Horſe-Bee, with a Variety of Experiments and Obſervations on Bots, very intereſting; communicated in a Letter from the Rev. ROWLAND GREEN, *jun. dated Mansfield, February* 20, 1806.*

DR. ADAMS,

WITHIN the circle of my acquaintance there has been many horſes loſt by bots. This was conſidered as a growing evil, and prompted the writer to endeavor to trace them through their ſeveral ſtages. Many experiments were made to aſcertain facts, from which the writer has not knowingly deviated. Imperfect as the hiſtory is, it is offered for your peruſal; and if you ſhould think it would be beneficial to the public, or be the means to lead to ſome more effectual remedy, you may make what uſe of it you ſhall think beſt.

Natural Hiſtory of the Horſe-Bee.

THE natural hiſtory of horſe-bees is involved in obſcurity. Many concurring circumſtances hinder us from exhibiting a complete hiſtory, their economy being different from that of other inſects. They are, in a certain period of their exiſtence, placed beyond the ſcope of obſervation; hence it is almoſt impoſſible to trace them from their firſt or imperfect ſtate to their laſt or perfect.

They are the moſt contemptible of all inſects; and there is ſcarcely any part of their exiſtence in which they are harmleſs. From this circumſtance, the following obſervations and experiments were made, hoping that they would lead to the diſcovery of ſome effectual remedy.

* This ſubject might perhaps with more propriety have been introduced into our medical department; it was not, however, ſo convenient.

Many valuable horſes are loſt by theſe inſects, which (while in their imperfect ſtate) for a ſeaſon inhabit the ſtomach, prey upon it, deſtroy its texture, and introduce convulſions and death.

The inſects, in their perfect ſtate, commonly preſent themſelves to our obſervation; therefore we ſhall begin with them in this ſtate, and endeavor to trace their offspring through their various gradations of "youth, vigor, and old age," or until they arrive to the perfect ſtate, which is completed in about twelve months.

The inſects appear towards the laſt of June or firſt of July, but are moſt numerous in Auguſt and September. Few are to be ſeen after one or two cold evenings. In 1801 they appeared on the 22d of June, and towards the laſt of September following there was a ſevere froſt, after which but very few were ſeen, although very numerous before.

There are two kinds, one larger than the other. The difference in their appearance is, the ſmaller kind have generally more down, and of a darker color than the larger; alſo, the ſmaller have tranſparent wings, but the wings of the larger kind have darkiſh ſhades. The principal difference in their economy is, that the larger kind generally caſt their eggs on thoſe parts of the horſe where he can bite, eſpecially on the anterior legs, but never under the throat; whereas the ſmaller never caſt their eggs on any part of the horſe except under his throat. Theſe laſt prove very troubleſome to the horſe in the ſummer ſeaſon, as any farmer can teſtify. Each kind varies in ſize, but in general they are about three-fourths of an inch in length. The body of the female is much larger than that of the male, it being conical, or ending in a tube, (through which the eggs are paſſed) which when they fly is folded up. They are very expeditious in cementing their eggs to the hair, eſpecially the ſmaller kind, which do it with incredible quickneſs.

The eggs are faſtened to the hair by a ſtrong cement, which neither the heat of the animal, combined with moiſture, nor froſt, will diſſolve. They are about three-fourths of a line in length, and of a light yellow color; and are always placed on the hair with the largeſt end downwards. One female, of a middle ſize, was known to contain 891 eggs—this being the laſt work aſſigned, which when concluded, the male and female periſh.

It has been ſuppoſed that the horſe's ſtomach was the only fit place for the eggs to hatch, and that the eggs were taken in by the horſe biting himſelf, &c. but this is not well founded. Theſe eggs, like all others, require a certain time to hatch.

The inſect in miniature muſt have time to expand, before it can burſt from its confinement; and this it may do, if the atmoſphere is of a proper warmth, in about 20 days * after the egg is caſt; but they do not generally burſt the eggs ſo ſoon, either from cold weather, † (which retards their coming out, and perhaps their growth,) toughneſs of the ſhell, or for the want of preſſure. When the inſect is formed, and ready to break from its priſon, it ſeems to wait for ſome preſſure, on which the ſhell is broken at the largeſt end; and the inſect, though very ſmall, appears to be active. When this minute creature burſts the ſhell by its own accord, it commonly remains for ſome time only a part out of the ſhell, waiting perhaps for the horſe to take him in. They are now ready to enter the horſe's ſtomach, which they do by the horſe biting himſelf or others: or they may fall on the graſs, and be taken in while the horſe is feeding. It is probable that thoſe of the ſmaller kind, under the throat, may travel to and enter the mouth, and from thence be carried into the ſtomach.

Theſe young bots (commonly ſo called) are provided with two ſharp hooks, by which, when they arrive at the ſtomach, they take hold, and there prey upon the horſe until they arrive to their full growth: but fortunately very few come to maturity, moſt are deſtroyed in their infancy; yet it is too often the caſe that too many remain conſiſtent with the life of the animal. When they are full grown, they are about three-fourths of an inch in length, and about one-fourth of an inch in thickneſs at the larger end, which has every appearance, to the naked eye, of being the head of the inſect, but the reverſe of this is true. At the ſmaller end (which is ſomewhat pointed) are the two hooks by which they hold faſt. They are covered with a thick tough ſkin, with ten folds or rings, which ſeem to be a chain of annular muſcles, whoſe fibres being contracted render the rings more narrow than before, and by theſe means they move from place to place, ſtretching forwards and taking hold with the hooks, and then contracting themſelves, which contraction draws them onwards; then unfaſten and ſtretch again, and ſo on. In thoſe rings, except the three poſterior, are ſet numerous ſmall ſharp points or thorns, projecting backwards, which prevent them from ſliping back when moving.

* September 12, 1802, placed a number of eggs (juſt caſt) in a moderate temperature of heat; on the 30th four hatched, and on October 2d two more came out by preſſure; others hatched not ſo ſoon.

† January, 1802, after ſevere froſty weather, eggs were taken from a horſe and placed in a warm room; ſome hatched in 5 days, others in 12. Eggs caſt in September may not hatch until the ſpring following.

They penetrate deep into the ſtomach, forming holes in it, and there hang by their hooks, which are exceeding ſharp. If they at any time loſe their hold they immediately catch again. Not any part of the ſtomach is exempted from them; but they are moſt numerous near the paſſages into and out of the ſtomach, where they many times place themſelves in great order. They are of all inſects the moſt tenacious of life, at this period; and at this time it is that they prove ſo deſtructive to horſes. Thoſe horſes that die of bots, moſt commonly die in the months of February, March, or April; however, this depends on the number and growth of the bots, and the injury done to the ſtomach. How long it is neceſſary for them to dwell in the ſtomach is unknown; but in the months of May, June, and July, eſpecially the two latter, they paſs the inteſtines, and immediately ſeek refuge in the earth, at an uncertain depth, according to the hardneſs of the ſoil. At this time they are of a light color. The ſecond day after they go into the earth they become contracted in length, leſs active, and of a light mahogany color. In one or two days more, ſtiff, hard, and the color darker:—they are now rather more than half an inch in length, and nearly one-fourth of an inch in diameter, oblong, motionleſs, and the points and hooks almoſt obliterated. They do not caſt off the ſkin, (which becomes a ſhell,) as many other inſects do, when they paſs into the chryſalis or aurelian ſtate. The wings when formed are folded up, but expand when they ariſe to new life. In thirty days after they enter the earth, the bee or perfect inſect breaks the ſhell near its ſmalleſt end, and comes out a renovated creature; "every thing is changed, all its powers are new, and life to it is another thing." With certain individuals there is ſome variation as to the length of the aurelian period: from certain cauſes it may be protracted beyond the uſual period. They in many reſpects reſemble the honey-bee, eſpecially when flying: they are of a lighter color, and have not the tongue neceſſary to draw honey from flowers. It is probable that they eat not in the perfect ſtate, being doomed only to the continuation of their ſpecies. Their legs are ſix in number. They are not active in the night.—A further deſcription perhaps is not neceſſary.

General Symptoms of Bots in Horſes.

Sometimes horſes which are hard worked diſcover no apparent ſymptoms until death. In young horſes the ſymptoms are generally better aſcertained. In general the horſe loſes

fleſh, coughs, eats but ſparingly, bites his ſides, and ſometimes with violence. Theſe ſymptoms continue and increaſe for a longer or ſhorter time, according to the violence of the caſe, and then a diſcharge from the noſe commonly takes place; and at length ſtiffneſs of the legs and neck, ſtaggering, laborious breathing, convulſions, and death.

Appearances on Diſſection.

Bots in abundance collected near the paſſages into and out of the ſtomach, and of various ſizes, according to the time of their reſidence there. The texture of the ſtomach penetrated and greatly injured. The internal coat of the ſtomach appears thickened and preternaturally hard on thoſe parts where the greateſt injury is done. In four out of five diſſections the lungs were found greatly inflamed; ſome parts in a ſtate of ſuppuration, others in a putreſcent ſtate. The one whoſe lungs were not marked with inflammation, was a young horſe of two years old, whoſe lungs had never been injured by hardſhips.

Query. Why this inflammation, &c. on the lungs?

The irritation ariſing by the action of bots in the ſtomach, may produce a general inflammatory diſpoſition in the ſyſtem: but as the lungs of horſes, by hard uſage, are more prediſpoſed to inflammation and its conſequences than any other given part of the body, the inflammation fixes there, and in many (if not moſt) inſtances ſeems to be the immediate cauſe of death.

Experiments to remove Bots from the Stomach.

Aloes, rum, mercury, jalap, brine, linſeed oil, pepper, tincture of tobacco, decoction of pink root, &c. are all ineffectual. This will not appear ſtrange when we conſider how tenacious they are of life. Nothing is more injurious than rum, and other heating things, to the irritable ſtate of the ſtomach, whoſe texture is nearly perforated in numerous places.

Almoſt every farmer in Maſſachuſetts has ſome ſpecific, and frequently one of the above named, or thoſe of leſs conſequence. A farmer's horſe ſickens with a cold, or pain in the ſtomach from hard travelling perhaps: he aſks his neighbor, What is the matter? he anſwers, The bots. What ſhall I do? Give him rum. The rum is given, and the horſe recovers immediately. Well, what is next? Why, rum has cured the bots. In like manner other things obtain credit for killing bots.

Experiments to make Bots let go their Hold without the Body.

The ſtomach laid open, the following things were applied to no effect, but in ſome inſtances they appeared to hang the ſtronger—rum, brine, lime, fiſh oil, Britiſh oil, burnt allum, corroſive ſublimate, ſpirits of turpentine, tincture of aloes, decoction of tobacco, pepper, volatile ſpirit, elixir camphor, weak elixir vitriol, &c. &c. Actual fire would cauſe them to let go, although not in all caſes, ſometimes certain individuals would cling the faſter and die, like a good ſoldier at his poſt, before they would relinquiſh their hold. They will live hours after they are conſiderably ſcorched by a candle. Strong vitriolic acid would immediately cauſe them to let go their hold. This acid, joined with oil or water, (equal parts) would anſwer the purpoſe, though not ſo effectually as the acid by itſelf. This acid was found to be more effectual than aqua fortis.

Experiments to deſtroy Bots without the Body.

The following experiments were made at different times, and on bots three quarters grown, or more.

			H.	Min.	
Immerſed in	Rum	lived	25		others not ſo long.
	Decoction of tobacco		11		
	Strong elixir vitriol		2	18	
	Volatile ſpirits			56	
	Spirits of turpentine			45	
	Eſſential oil of mint		2	5	
	Decoction of pink root		10		no effect.
	Fiſh oil		49		
	Linſeed oil		10		
	Solution of nitre		2		
	Elixir proprietatis		10		
	Beef brine		10		
	Solution of indigo		10		
	Elixir camphor		10		

The experiments which had no effect were diſcontinued at the expiration of the time ſpecified. Bots cannot endure the cold ſo intenſe as to freeze.

Preventive Means.

Scrape off the eggs, when laid on the horſe, every eight or ten days. A much longer interval will anſwer the purpoſe, even once in twenty days; but there is a greater certainty of deſtroying the whole in ſhort intervals, as ſome may be overlooked at one time and not at another. This practice muſt be continued through the ſeaſon of them, and may be performed with eaſe with a ſharp knife. The eggs ſhould not be ſcraped off where the horſe can feed, as in that caſe the young bots might be taken in. It is difficult to remove thoſe eggs laid

under the throat with a knife, but they may be deſtroyed with a hot iron, made for that purpoſe.

Palliative Means.

From what has been ſaid, it appears exceedingly difficult to remove bots from the ſtomach: they are covered as with a coat of mail, and ſeem to be proof againſt any thing that can be thrown into the ſtomach with ſafety.

As no certain method has been found effectual, in removing them from the ſtomach, the whole indication ſeems to be to remove irritation and inflammation; and this to be done by blood-letting and a free uſe of mild oils. Blood-letting has a tendency to remove the inflammatory diſpoſition, and oils lubricate the fibres of the ſtomach, and tend to obviate the effects of the ſtimulus which produces inflammation and death. However, all this ought to be done in the early ſtages, and even then the event is very uncertain.

In moſt inſtances it appears that the immediate cauſe of death was the local affection in the lungs; and in thoſe inſtances where the local affection of the lungs did not exiſt, it appears that the irritation occaſioned by the bots introduced convulſions ending in death.

When the lungs are much affected death is almoſt certain; but in thoſe inſtances where the lungs are not affected, there is conſiderable probability, that by blood-letting and a free uſe of oils, the effects of theſe inſects may be warded off for ſome time, and perhaps long enough for them to come to maturity, at which time they ceaſe to act.

For the MEDICAL AND AGRICULTURAL REGISTER.

The great Importance of good Orchards—How to have them ſo—Illuſtrated by a Variety of intereſting and important Obſervations.

DR. ADAMS,

I AM very glad to ſee that your Regiſter for March contains ſome "obſervations on orchards, and directions for planting and pruning fruit trees:" it is a ſubject of great and laſting importance, not only to the preſent race of farmers, but to their poſterity. He that plants an apple tree, grafts it with a *Roxbury Ruſſetin*, or *Greening*, and takes good care of it till the roots have ſpread ſo much that it will take care of itſelf, has provided an inheritance for his ſon. A ſingle tree has been often known to bear ten or a dozen barrels of ſound winter apples. A tree, while it is getting its firſt ten years' growth, ſhould no more be neglected than a child's education. The

ſlothful and the careleſs muſt go without cider, or go to the neighbors' houſes to beg it.

There is no doubt the growth of a tree may be forced too much by manure, eſpecially while it is young: but there is little danger of this when the tree has ſpread its roots very much. The dung, eſpecially if ſpread on graſs land, will ſoften the ſoil, and reach the roots ſo much cooled by filtering through the ſward, that well grown trees will thrive the better for the manure.

Orchards are to be expected to thrive beſt on good deep loamy ſoils, which ſhould not be ploughed after the trees are planted out. We ſee ſome inſtances, however, of apple trees on ſharp gravelly ridges, that are kept conſtantly ploughed and planted with potatoes or peaſe, which, for rapid growth and abundant fruitfulneſs, exceed thoſe that are planted on richer ſoils left in graſs ſward.

The third year after planting out the trees is ſoon enough to graft them: till they become flouriſhing it is beſt to let them alone. No fruit is more profitable, or makes a richer cider, than the *Roxbury Ruſſetin:* but it is in vain to expect this ſort of fruit to flouriſh in barren neglected land. The *Greening*, and many other good ſorts of apples, are leſs dainty. In paſtures where apple trees are ſcattered about, it is recommended to graft them with ſweet apples, which will leſs injure the cows than ſuch as are ſour; and large ſweetings will not be ſo likely to choak them as ſmaller apples.

The clay mortar, thoroughly well mixed with cattle's hair, is excellent for grafting. No ſtrings, rags, or tow are neceſſary; this greatly ſaves time in grafting: and the hair prevents the mortar from ſoon peeling off.

When cattle or horſes are allowed to rub their itching necks againſt the green ſtems of young trees, the bark will look greaſy: this is believed to be injurious to the trees, and ſhould be prevented by ſtakes, ſo placed that the wind will not gall the bark againſt the ſtakes, or by tying thorn buſhes to the trees, or by keeping the cattle in the orchard only to bait, and that no longer than hunger will keep them buſy in eating.

Cider is probably the wholeſomeſt of all drinks for hard laboring people; and it is ſupplied from a ſmall but flouriſhing orchard, cheaper than ſtrong beer, the drink of Engliſh huſbandmen. It is ſo much the more to be recommended, as *rum* is making ſuch inroads on the gains, the morals, and conſtitutions of farmers. This very ſpring then, let every prudent huſbandman be ſtirred up to take the beſt care of his *old* orchard, or to plant a *new one.*

MISCELLANEOUS ARTICLES.

ARTICLE XIII.

Result of Meteorological and other Observations, for March, 1806; *made at* DEERFIELD, (*Mass*) *by Mr.* EPAPHRAS HOYT; *at* PORTSMOUTH, MASON, NEWBURYPORT, CONCORD, *and* BOSTON, *as in the preceding Numbers:—For the Medical and Agricultural Register.*

March, 1806.	*Mean degs. at sun-rise.*	*Mean degs. at 2 P. M.*	*Mean degree of the month.*	*Greatest heat in the month.*	*Least heat in the month.*	*Prevailing winds.*	*Marriages.*	*Births.*	*Deaths.*
Deerfield *				31ſt day 73°					2
Portſmouth	26 1/3	37 2/3	32 1/2	31 62	1ſt day 12°	N. W.			
Maſon	27 2/15	37 1/15	32 1/2	31 61	9 11	N. W.	—	—	2
Newburyport	24 1/8	36 4/5	30 1/2	31 64	1 11	N. W.			
Concord	25 2/3	36	30 5/6	31 65	1 9	N. W.	2	5	3
Boſton	26 1/2	38 2/3	32 2/3	31 66	1 16	N. W.			

WEATHER.†

1ſt *day*, clear and cold
2— cloudy, fair
3— fair
4— ſnow, very ſtill
Maſon, 3 inches
Con. ſea ports, 1½
5— cloudy, ſpitting of ſnow
6— cloudy, fair
7— cloudy, light ſnow
Concord, 1½ inches
8, 9, 10, 11— clear and cold
12— cloudy, little ſnow
Concord, 1½ inches
13 } cloudy, ſome ſnow,
14 } and a little rain
15— overcaſt, fair
16, 17, 18, 19— fair and cold
20— cloudy, ſn. at night
Deerfield, 1½ inches
Maſon, 4 inches
Newburyport, 2 inc.
21— rainy morn. ſome places ſnow, fair A. M.
Portſmouth, ſtorm violent
Concord, ſnow 1¼ inc.
22— fair, flying clouds
23— cloudy, fair
24— ſnow, ſtorm violent in *Portſmouth*, 3 inc.
Concord, 2½ inches
25— clear and cold
26— ſnow, cold
Deerfield, 3 inches
Newburyport, 2 inc.
Concord, 2 inches
27— fair, high winds
Boſton, good ſleying in the forenoon
28, 29— fair
31— fair and pleaſant

Newburyport.—There was ſome appearance of the aurora borealis (when not prevented by clouds) almoſt every evening in the two firſt weeks of this month. Blackbirds and robbins began to make their appearance about the 22d of February. There has been no epidemical nor prevailing diſeaſe this month. There have been 24 deaths in the months of January, February, and March.

* The obſervations at this place commenced with the 7th day of the month, therefore the reſult is incomplete.

† Where no particular place is mentioned, the obſervation againſt each day is to be underſtood as applying to all the different places where theſe obſervations are taken.

Deerfield.—The *degrees of heat* are taken with a mercurial thermometer, (Fahrenheit's ſcale,) hung in the ſhade.

Of the ſtate of health, &c.—There has been no uncommon ſickneſs: I have noticed a few caſes of ophthalmia. In ſome of the neighboring towns there have been a few deaths from phrenitis.—Of the deaths inſerted in the *column of deaths*, one was a perſon whoſe conſtitution was worn down by a chronic diſorder, which I cannot name: the other was a child, whoſe diſorder was in the bowels; on opening the abdomen, a ſingular kind of knot was found in the inteſtines, which was drawn ſo tight that the paſſage through the inteſtines was entirely obſtructed; this ſoon produced a mortification, which occaſioned the death of the child.

Of ſtorms, &c.—None remarkable. Very little ſnow has fallen this month; I believe the quantity did not exceed five inches. No rain has fallen. The ground has been bare moſt of the month; but vegetation lies dormant, except on the ſouth ſide of the hills on the margin of our meadow, where nettles and dandelions have come forward, (April 3.) The greateſt degree of cold obſerved in this town the winter paſt, was the 18th of January; on this day, at ſun-riſe, the mercury was 23° below zero.

EP. HOYT.

ARTICLE XIV.

Extracts from various Authors.

Seed. Let your ſeed be ſuch as you would wiſh to have your future crop—*the beſt of the kind.* As the largeſt animals produce the moſt profitable ſtock, ſo it is in vegetables: the largeſt ſeed of the kind, plump and ſound, is the beſt, being well ripened, and kept from injuries of weather and inſects.

Commonly ſpeaking, *new* ſeed is to be preferred to old, as growing more luxuriantly, and coming up the ſurer and quicker. As to the *age* of ſeeds, at which they *may* be ſown and germinate, it is uncertain, and depends much *how* they are preſerved.

Seeds of cucumbers, melons, gourds, &c. which have thick horny coverings, and the oil of the ſeed of a cold nature, will continue good for ten, fifteen, or even twenty years, unleſs they are kept in a very warm place, which will exhauſt the vegetable nutriment in a twelve month; [*three* years for *cucumbers*, and *four* for *melons*, is generally thought to be beſt, as they ſhoot leſs vigorouſly than newer ſeeds, and become more fruitful.]

Oily ſeeds whoſe coats, though they are not ſo hard and cloſe as the former, yet abounding with oil of a warmer nature, will continue good three or four years, as radiſh, turnip, rape, muſtard, &c.

Seeds of umbelliferous plants, which are for the moſt part of a warm nature, loſe their growing faculty in one, or at moſt two years, as parſley, carrots, parſnips, &c.

Peas and *beans* of two years old are by ſome preferred to new, as not likely to run to ſtraw.

Sowings ſhould be generally performed on *freſh* dug or ſtirred ground. There is a *nutritious* moiſture in freſh turned up ſoil, that ſoftens the ſeed to ſwell and germinate quickly, and nouriſhes it with proper aliment to proceed in its growth with vigor, but which is evaporated ſoon after from the ſurface.

Evelyn ſays, ſeeds for the garden cannot be ſown too ſhallow, ſo they are preſerved from birds, for nature never covers them.

Steeps are uſed to render the ſeed more fruitful, as preſervations againſt diſtempers, and to prevent worms from eating it.

[There are many well atteſted facts to prove the utility of ſteeping ſeed for ſowing. In ſome dry ſeaſons, eſpecially the ſteeping of the ſeed or not ſteeping of it, makes the difference of a *good crop* or *no crop at all.* Steeps may be chamber lie, the draining of a dung hill, or a weak ſolution of ſalt in water. In either of theſe the ſeed ſhould be ſoaked eight or ten hours: when taken out, ſprinkle over it a quantity of newly ſlacked lime, or plaſter of Paris, or even aſhes, ſtirring the ſeed until every grain is covered. This operation is done immediately before ſowing.]

Tull relates that a ſhip load of wheat was ſunk near Briſtol in autumn, and afterwards, at ebbs, all taken up, after it had been ſoaked in ſea water; but being unfit for the miller, the whole cargo was bought up by the farmers, and ſown in different places. At the following harveſt all the wheat in England happened to be ſmutty, except the produce of this brined ſeed, and that was all clear from ſmuttineſs. This accident has juſtified the practice of brining ever ſince, in moſt parts of England.

To prevent Crows pulling up Corn. Take ſo much corn as is intended to be planted the next day, and put it into warm water at night; in the morning drain off the water, and add more warm water, juſt enough to cover the corn; then ſtir in tar, in proportion of *one pint to a buſhel* of corn; after which, drain off the water, and add aſhes, ſlacked lime, or plaſter of

Paris, enough to prevent the corn from ſticking. It is ſaid, that corn thus prepared crows will never meddle with: it is alſo effectual againſt *blackbirds*. It is neceſſary the corn be well ſoaked before it receives the coating of tar, as that does in ſome degree exclude the moiſture from the kernel; and without this precaution it might linger in coming up.

NOTES.

To Readers and Correſpondents.

BY the attention of our correſpondents, we have been enabled to fill this number of the Regiſter almoſt wholly with *original* matter. We will not here take up room, to expreſs how much we are obliged by theſe favors: a conſideration, however, of greater importance than ſimply that of *obliging us*, ought to come into the account; it is that of *doing a great public benefit*; and when all other conſiderations ſhall prove inſufficient, this alone, it is believed, will be effectual. People are diſpoſed to *read*, if gentlemen of obſervation and practice in medicine and agriculture will *communicate*; and we believe gentlemen generally *will be diſpoſed to communicate*, ſo ſoon as they ſhall ſee and know that people *are diſpoſed to read*. We have, therefore, the fondeſt expectations that our hopes, and the wiſhes of the public, in this publication, ſhall eventually be gratified.

Hydrophobia.

MUCH alarm has been excited at *Leominſter*, (Maſs.) of late, from apprehenſions of this moſt terrible diſeaſe. *Nine perſons*, and a number of animals, have been bitten by dogs of very ſuſpicious appearances. It is now more than ſix weeks ſince this happened. The dogs (two in number) were killed immediately. One of theſe dogs, in the abſence of his maſter, roſe up againſt the family: in attempting to reſcue one, another was bitten; and thus the conflict continued till the whole family were bitten, and the dog driven out of doors. The other dog proceeded from Lancaſter, through a ſection of the town, entering into houſes, and what was moſt ſingular, in a number of inſtances running to the fire, clawing out the coals and champing them with his teeth. Children attempting to make play with the dog were generally bitten, and one or two other perſons. The dog was laſt ſeen in a cow yard, ſetting furiouſly upon the ſheep, ſome of which were bitten, and where he was killed. However, as no perſon, nor any animal bitten, has yet been affected with the diſeaſe, it is preſumable, notwithſtanding appearances, that the dogs *did not carry the virus* in their bite.

N. B. The extract from Dr. ARMSTRONG, promiſed in this number, is omitted for want of room.

CONDITIONS OF THE REGISTER.

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